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LECTURES
ON THE
PRINCIPLES AND PRACTICE OF PHYSIC,
BY DR. ARMSTRONG.

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Those of our readers who have seen the articles in the "*Westminster Review*," on the "PLAGUE and SANATARY LAWS," will not be a little surprised to find that the following admirable Lecture, which embraces the facts and opinions contained in those articles was delivered by Dr. ARMSTRONG *four years since*, and they will be still more surprised at the want of candour evinced by the writer of the essays in question in not acknowledging the source from which he derived his information, when we further state, that he was then, and has subsequently been, in the habit of attending Dr. ARMSTRONG's discourses.

LECTURE 26.

On the origin of Typhus Fever, in which its Contagious or Non-contagious nature is considered.

IN my last Lecture, that on Erysipelas, I finished the consideration of the varieties of *Common Fever*, that fever which, under all its modifications, arises from the operation of common causes, namely, common depressants, common irritants, common stimulants, or common interruptants; and I have proved, I trust, by a reference to symptoms, to dissections, and to the effects of remedies, that this fever is legitimately divisible into three great leading varieties, namely, common congestive, common simple, and common inflammatory fever. One or two slight deviations have been made from that arrangement, as far as the remote occasions are concerned; and hence, in speaking of inflammation of the air passages, I showed that it sometimes arose from a common cause, such as cold, and sometimes from a peculiar cause, such as an epidemic constitution of atmosphere. In like manner, it was explained how the purulent form of ophthalmia sometimes proceeded from the intensity of a common cause, and sometimes from the application of a peculiar virus; and lastly, it was particularly illustrated, that erysipelas, under its phlegmonoid, erythrematic, or specific varieties, depended upon common or peculiar causes, and that, in the two last mentioned varieties, the affection of the skin was only a small part of the disorder, the pia mater and arachnoid, and more especially the mucous membrane of the bronchia and of the intestines being always affected, and occasionally even the tunics of some internal arteries and veins. Having proceeded so far, I have now to enter upon the investigation of those agents in nature which have not the properties of common causes, but which are marked by special ones; yet I believe that I shall here also be able to show, by facts and fair deductions, that these peculiar causes, namely, the poison called malaria, human contagions, and certain epidemic conditions of atmosphere, likewise produce three forms of fever—the congestive, simple, and inflammatory—in reference to

their internal pathology, blended, however, with some peculiar effects proceeding from the peculiarity of the remote cause or occasion; such effects being the most conspicuous in the external pathology, such as the rash of measles, the eruption of small pox, or the efflorescence of scarlet fever. This doctrine, I repeat, shall be confirmed by an appeal to symptoms, dissections, and the effects of remedies.

With respect to the peculiar causes which produce fever, there are some which may be termed *infections* and others *contagions*, for remember that I make a distinction between infection and contagion; infection is a local taint, or contamination of air, which arises from a combination of agents or circumstances external to the human body; whereas, as far as human inquiry has yet legitimately extended, contagion originates, not without, but within the body, an apparently subtile secretion from the blood itself, the mode of the primary generation of which is yet one of the arcana of nature. Besides, there appears to be another difference between contagion and infection, namely, that contagion is unquestionably communicable from person to person, this communicability being the true test of a contagion; whereas, though it has been presumed, that febrile disorder commencing from an infection, as before defined, propagates itself by contagion, by the new formation or assimilation of some subtile and special power or poison—though this, I say, has been presumed, yet it has not, to my mind at least, been indisputably proved to be the case; and to me it appears a problem still requiring a satisfactory solution. That fever arising from infection propagates itself by contagion is the prevailing dogma of time-established schools and colleges, but there it amounts only to a prejudice; an opinion taken up and maintained without due examination; an opinion which, like most others descended from such authorities, requires to be tried and tested by our own individual and dispassionate investigations, for the time has at length come when the human mind maintains the sacredness of independent inquiry.

In this lecture I shall confine myself to the consideration chiefly of one infection, namely, that which is vaguely called *Malaria*, or *Marsh Miasm*, and which originates from certain conditions of the earth and air. It is an exhalation which, evading our senses, is only, in the present state of our knowledge, distinguishable by its effects. What are these effects? These are, first, the production of an *intermittent* form of fever; secondly, of a *remittent* form of fever; and thirdly, of a *continued* form of fever; each having, as will be shown in my next lecture, a peculiar combination of symptoms by which they differ from common fever, although their internal pathology is similar to fevers proceeding from common causes, that is to say, it is congestive, it is simple, or it is inflammatory fever, under the general operation of this peculiar agent: the intermittent, remittent, and continued forms of fever, each having certain peculiar combinations of symptoms as the regular effects of malaria, or marsh effluvia. The intermittent form of fever is simple, the remittent inflammatory, and the continued still more highly inflammatory, as will be clearly demonstrated in my next. Though the intermittent, remittent, and continued forms of fever, from malaria, pass and repass into each other, yet it is to the continued form that the designation of typhus has been attached, under the supposition that it proceeds from human contagions, and that it is not related to the intermittent and remittent forms.

Typhus Fever.

Now it happens that we have no correct definition of typhus, nay, not the semblance of a definition, for it is an insult to common sense to admit CULLEN'S definition to be such, which, including none of the essentials of typhus fever, is so loosely worded as to be applicable to the last stage of any fever where the brain has been much affected in the first. Indeed most of Cullen's definitions, as they are called, are merely nominal, not real definitions, since they are abstract words, by which a number of symptoms are strung together, without any reference to the pathological con-

ditions upon which those symptoms depend. This is particularly the case in regard to what Cullen denominated *febres*, concerning the true nature of which he seemed to know little or nothing; and yet this is the author who is held as a guide in most of our schools and systematic works! You are aware that Cullen has certain artificial distinctions, which he calls classes, orders, genera, and species. A definition of a class, nosologically, is the most general description which can be given of affections which have symptoms in common; and a definition of an order is the next most general description, while that of the genera and species becomes more and more particular. Now Cullen's definition of *pyrexia* is this, "After shivering succeed, a quick pulse, increased heat, with interruption and disorder of several functions; diminution of strength, particularly that of the joints." That this definition is very general must be admitted, indeed nothing can be more indefinite; besides, it is really inaccurate as to matter of fact. Cullen here assumes, that shivering is always an essential part of fever; but I showed, on a former occasion, that fever sometimes arises from the direct application of a stimulant, without any cold fit or shivering at all; neither does the hot stage invariably follow the cold one, as this definition implies, for the cold stage sometimes remains and constitutes genuine congestive fever. But to go to his order *febres*, which he defines thus—"Pyrexia, preceded by languor, lassitude, and other signs of debility, without any *primary local disease*."—This definition, you will perceive, is only a repetition of the former, with the addition of a particular clause, namely, the words, "no primary local disease," by which he distinguishes it from the class. Pyrexia is made, by Cullen, a part of the definition of febres, and the definition of pyrexia describes the functions as being much disturbed, yet we are told, even in febres, that there is no *primary local disease*. He assumes this, but it is a metaphorical and medical absurdity, for no disorder of the functions can possibly take place without having been preceded by some change in the organs connected with such functions, and that change is, as I before attempted to prove, either a state of disorder or disease. Cullen, like many of the older authors, did not, it must be confessed, discover the existence of that disorder, and therefore the term idiopathic fever was an admirable shelter of expression, one nicely fitted to conceal an ignorance respecting those alterations which take place within the body.

If we pass on to Cullen's *continued fever*, he describes it after this fashion: "Fever, without intermission, not arising from marsh miasma, but continuing with remissions and exacerbations, although not very remarkable, two paroxysms in each day." Here is an assumption that a continued fever never arises from malaria, or marsh miasm; but the truth is, as will by and bye appear, that this cause, operating in almost all parts of the inhabited world, does very frequently indeed produce continued fever, that usually termed typhus. If we pass on to his subdivisions of continued fever, we find his *synocha*, his *synochus*, and his *typhus*. As to his definition of synocha, what is it pray? He says, the heat is much increased, the pulse frequent, strong, and hard, the urine red, the functions of the sensorium little disturbed. Now only recollect that synocha is arranged under the order febres, where, according to Cullen, there is "no primary local disease." But did any man ever see a fever, attended with such symptoms, which was not preceded by some primary local disorder? Most confidently, I answer, never. Synochus, we are informed, by the same authority, is a fever compounded of synocha and typhus; a synocha in the beginning, and a typhus towards the end. Indeed! Is a disorder really one thing at the commencement, and another at the close? Do small pox, measles, scarlet fever, pass into each other? Is there any known affection which so changes its character, nay, its constitution? This is surely a nosological subtility, not sanctioned by what is yet known in the changes of explored nature. But let us hear what Cullen says about typhus. It is, agreeably to his creed, a contagious fever, in which the heat is but little increased; the pulse

weak, small, and in general quick; urine little changed; the animal functions much disturbed; prostration of strength. But did any man ever witness such a concourse of symptoms unpreceded by primary local disorder? The answer is, assuredly never. Moreover, this enumeration of symptoms is no more applicable to typhus fever than to any other fever, where the powers of life are giving way, and where the brain is oppressed. In truth, it contains no correct allusions to genuine typhus fever, the characters of which I shall endeavour to describe, when I shall have premised, in this Lecture, some remarks on the remote occasions, and its contagious or non-contagious nature.

Remote Causes of Typhus.

The remote exciting cause of typhus is peculiar, but there are certain circumstances which favour the operation of this cause, and they may be called the *predisposing causes*, all of which operate in one mode, namely, by producing *debility*. It is in this way, if an army be in full retreat, the minds of the men being harassed, and their bodies enervated, and if they pass over, and especially if they rest in, a district where the malaria prevails, typhus is almost sure to break out amongst them. It is on the same principle that famine becomes the predisposing cause of typhus, for then people experience physical want with mental distress. The history of this fever in Ireland has often been connected with scarcity, of which many proofs might be given. The epidemic which occurred in and about London, in the year 1818, shows the influence of the same cause; many of the poor were then almost starving, and the summer having been unusually hot, they were very much predisposed to the attacks of typhus. Fasting predisposes powerfully in some; thus, if a man go out without his breakfast and fatigue himself by a long walk or business, he is very liable to be attacked by this disorder, if exposed to the exciting occasion. It is for the same reason, namely that of depressing the mental and physical powers, that fear operates so decidedly in predisposing to this affection. The Romans were so well aware of this, that they had no less than three temples in different parts of Italy, to inspire the people with confidence, dedicated to the goddess Febris. In modern Turkey, the doctrine of predestination prevails among the natives, and travellers assert that they are less liable to plague than strangers who do not believe in that doctrine to the same unqualified extent. Charms were worn in ancient times, and incantations performed for the purpose of communicating confidence; nay, even in the present times, people often put camphor bags about their necks, which give the wearers courage, and courage is the best preventive of typhus. The weather also powerfully predisposes to the influence of infection, especially damp still weather, and therefore the autumn generally favours its operation. Cold is supposed by some a cause of typhus, but it is merely a concurrent one, by weakening the body. Women, upon the whole, are more liable than men, but the strongest individual may be attacked, if exposed to a concentrated malaria, or marsh miasm. Formerly I believed, that human contagion was the primary and sole exciting cause of typhus fever; but having been accidentally led into a new path of inquiry, and having discovered, to myself, at least, satisfactorily, that I was mistaken in this respect, the only reparation which I can make is thus publicly to acknowledge my error, and however humiliating such an acknowledgment might be to human pride, yet I have the reward of possessing what I hold to be the truth at last.

It is now nearly six years ago since I attended an individual who had an intermittent fever or ague, distinctly marked by the cold, hot, and sweating stages, followed by a perfect intermission, and recurring at certain intervals. But in a few days this fever lost the intermittent type, it became as distinctly remittent for a few days, and then this remittent changed its character and became continued, and at last assumed the most malignant symptoms of typhus. This case made so deep an impression on my mind, that I could not help asking, whether intermittent fever, remittent fever, and the continued fever, called ty-

phus, might not be modifications of one and the same disorder? At all events, I determined to investigate the subject most minutely, and commenced it, independently of the former prejudice of my college education, as if, indeed, I had known nothing previously on the subject. The result of my inquiries is, that I believe malaria to be the primary source of what is commonly denominated typhus fever, that this fever has an intermittent, remittent, and a continued form, and that each of these forms so pass and repass into each other as to show that they all are really modifications of one affection, as far as their remote exciting cause is concerned. Having imagined, on collegiate authority, for a term of fifteen years, that typhus originated from human contagion, and having discovered this opinion to be erroneous, the very relation of such a circumstance ought to teach you how cautious you should be in forming your opinions on matters of importance; that you should not, in fact, take them up upon the mere assertions of others, but deduce them from a consideration of facts, viewed neither through a medium of prejudice, nor of partiality, with respect to particular persons. When I communicated this change of my opinion to some of my acquaintance, I have been much amused to observe how it has been received. One shrugs up his shoulders, hems, and says that it is very strange; another cocks his eye into a corner, puts his hand into his pocket and smiles, sarcastically smiles; a third shakes his head, and swears that typhus not only arises from, but propagates itself by contagion; while a fourth strokes his chin, seems at a dead stand, and says that it is a subject which certainly requires further investigation. Now if at the end of this Lecture you should stroke your chins, and make a similar declaration, I shall be perfectly content, for all that I wish is, not that you should adopt my opinion, but that you should investigate for yourselves, with all that sincerity, with all that purity of mind which its great importance to society demands.

But to come to the *facts;* What are the facts which justify the opinion that typhus arises from malaria? I shall now adduce those which I have delivered from this place for some years past, and which, I believe, when taken together, you will deem perfectly conclusive as to the primary source from which typhus proceeds:

1. Typhus often arises simultaneously, in single cases, in places remote from each other. This circumstance frequently occurs both in and about London, and I ask, how is it to be explained on the doctrine of contagion, no direct or indirect intercourse having existed, by persons or things in these situations?

2. It often attacks *many persons* at the *same time*, and in the same place. An instance of this occurred sometime ago, in which several children were attacked in one day, in a school where no fever had previously prevailed. How is that to be explained on the doctrine of contagion?

3. Where many persons are attacked in the same place or district, if you trace the history of the cases minutely backwards, you will generally find that some appeared under an intermittent, some under a remittent, and others under a continued form, a fact for which the doctrine of contagion cannot account.

4. These forms, namely the intermittent, remittent, and continued, pass and repass into each other in many cases, the intermittent becoming remittent, and the remittent becoming continued; while, on the other hand, the continued sometimes becomes remittent, and the remittent sometimes intermittent; and does the doctrine of contagion at all explain this conversion? It certainly does not, whereas the doctrine of malaria does, since it produces an intermittent, a remittent, and continued fever, convertible into each other, a peculiarity which is not observable, so far as I know, from any other remote occasion whatever.

5. Typhus *prevails* most remarkably in *particular places*. The common opinion is, that it prevails only in crowded situations, but this is a great mistake, as can be easily proved by an advertence to facts, which are exhibited within the metropolis, and without its boundaries in the most open districts of the country. A house had been shut up for some time, when

two young persons, who had been visiting in the country, returned to it, and were shortly afterwards seized with typhus fever, yet this house was situated in one of the most airy parts of the town, where I have known other cases to arise. Sometime ago, I was riding over a common one day, with a medical acquaintance, many miles distant from London, and he pointed out certain widely scattered cottages in which typhus fever occurred under a remittent and continued character. It prevails in some particular spots, not only in London, but also in the vicinity, sometimes in solitary houses, and sometimes in the most beautiful villages, especially in one only a few miles distant. The same thing occurs in foreign countries, in Italy, in America, and in Turkey. Indeed there is scarcely a district in London in which it does not appear, but much more in some than in others. There is one district in particular, situated partly in one parish and partly in another, where I have traced the rise of typhus, at different times, for nearly half a century back; and it is a most curious fact, that it thus occurs in certain parts, or rather patches of the metropolis, as if limited by lines, beyond which it does not pass. Can the doctrine of contagion explain this phenomenon?

6. The origin of typhus is connected with *certain states of the air* as well as of the *earth*. It is most frequently found in that state of the atmosphere when the temperature varies from about 50° to 80°. It hardly prevails at all in winter, if the air be cold, and the earth locked up by a frost; it usually appears more rife in spring, still more so in summer, and most of all in autumn, when the air is still, thick, and warm in the middle of the day, and when the putrefactive process on the earth's surface is, perhaps, the most active and general. Since April 1824, to the present time, December 1824, typhus fever has been more than usually prevalent, apparently from the influence of the warm moist weather; but to shew that the earth and the air are both concerned in the production of its original cause, I may mention, that while it has been very common in several districts which I could name, it has not occurred, as far as my observations have gone, in others, especially in Islington, in the higher parts of Kensington, and about Wimbledon-common, which are high and gravelly situations, and which have been remarkably exempted from the visitations of typhus. What is still more striking, a friend of mine who resides in Norfolk, and who frequently used to meet with typhus in his district, arising from malaria, under an intermittent, a remittent, and a continued form—what is very remarkable, I say, is, that he has not met with any cases for some time; and the reason of that is, because the district usually infected by malaria has been covered by one continuous wave of water from the heavy rains, but he is sure to meet with it when the water subsides, and when a slime is presented to the sun, as happens in Egypt from the overflowing and subsiding of the Nile.

Some facts may now be adduced to show that typhus really does arise from a peculiar terrestrial exhalation. A very respectable man whom I attended, and who laboured under a very severe continued typhus, marked by petechiæ, brown tongue, and enlarged glands in the groin, contracted the affection, with four or five other persons, from having stood in a kitchen, the floor of which had been overflowed by a slimy and offensive fluid from choked drains. Before I retired from my late office as Physician to the Fever Hospital, a man, his wife, and two children were sent in, all affected by typhus. The account which this man and his wife gave of themselves was this, that they had been into the house adjoining to their own when the family had a fever, and that they had caught it there. I went to the village from which these people came, and took one of my pupils with me, but on inquiry we found that the fever which had taken place in the adjoining house was the scarlet fever, and that it had occurred more than four months before this man's family had been attacked by typhus. This may caution you as to the implicit reception of human testimony. On further investigation I ascertained, that the fever which appeared in this family in some had been intermittent, in others had been remittent in the

beginning and had afterwards become continued. Besides this was the spot where typhus usually broke out in that village, and it was surrounded by an open common sewer. A young physician, a pupil of mine, lodged in a house, the mistress of which was attacked by typhus, the drains being in a bad situation and state. She recovered. Sometime, several weeks indeed afterwards, the servant was attacked, and also recovered; but my young friend took the alarm about malaria and changed his lodgings. Many months afterwards he returned to this house, and being fatigued by long walks, and broken up by hard study, he had not been long there till he in like manner was attacked by typhus, but he also got well. There is one house in the Borough, in which I have attended three persons successively for typhus, the last of whom was one of my pupils, and he informed me, from inquiries made after his recovery, that though in a few years the families had been repeatedly changed, yet that some of the members of each family had been attacked. A common open sewer runs behind the house. The Borough is one of the districts where malaria prevails, and the drains are in a very bad state in many places. Again, at the west end of the town, four persons were seized by typhus on the clearing out of a foul dirt-hole. A friend of mine who practised long in Demarara came to the same conclusions, namely, that typhus arose from malaria, and that it was intermittent, remittent, or continued. On one occasion typhus attacked a great number of the soldiers in the barracks; and walking one day round with an officer he observed that the pales were blackened at a particular spot, and as the wind blew from that quarter towards the barracks, it struck them, that the cause of the fever emanated from that spot. It was examined, and it was found to be an old drain, which had been filled up with vegetable matter then in a state of putrefaction. It was cleared out, and typhus disappeared from the barracks. My friend met with other examples of the same kind equally remarkable. Now I ask you as honest men of common sense, I ask you as the pure guardians of the public welfare, and the genuine lovers of medical science, whether all these facts, relatively and conjunctively considered, do not show that malaria, and not human contagion, is the primary source of typhus fever? The investigation of the circumstances under which malaria is formed is one of the most important to which a philosopher and philanthropist can direct his mind and heart. The formation of this miasm seems to be connected with a certain degree of moisture and warmth, favouring the decomposition perhaps both of animal and vegetable matter. Dr. DWIGHT, an American divine and traveller, has perhaps made the nearest approach to the discovery of this subtile agent. When on his travels about the lakes of America, he found that typhus did not prevail round the margin of lakes which were fed by natural springs, and which were bright upon the surface; but, on the contrary, it did prevail round the margin of those artificial lakes which, not being thus fed, were not only dull upon the surface, but covered occasionally by a dirty film, which, on experiment, he found to be the putrefactive product of animalculæ which are existent in vegetable matter. But I would strongly recommend you to investigate this subject, since it involves the question of the prevention of a disorder which exists in most parts of the world.

Typhus fever, in proportion to the population, was much more prevalent in London formerly than it is now, and this may be accounted for by the improvement which has taken place in the ventilation, draining, and general cleanliness of the city. Erasmus mentions that in the time of Elizabeth the royal drawing-room was strewn with hay, and we know that the streets were narrow and dirty, the houses ill-drained, and the general habits of society much less cleanly than at present. Though much yet remains to be done, perhaps we might compare the state of modern London to that of ancient Rome for cleanliness and the preservation of the public health. Celsus, Livy, Strabo, and Virgil, have all alluded to malaria, and unquestionably the health of the people was preserved by the formation

of regular *cloacæ* to drain and receive the filth of the city. In the reign of Augustus curators were appointed to cleanse the streets and keep the cloacæ in good condition. The ancient Romans, tempted by their fine climate, lived much in the open air. Besides, as the government conciliated the people as long as any traces of liberty remained, the public buildings were magnificent, and much frequented by them; and unless great care had been taken as to cleanliness of the earth's surface in particular, typhus must have been very prevalent there. What a contrast between ancient and modern Rome! What a contrast between ancient and modern London! The one has been enslaved, and the other free for ages. Rome is now not only infected by the malaria of the earth, but that worse malaria of the mind, which makes her the very slave of those barbarians whom in her better days she despised; while London nurses within her bosom the pure spirit of independence, which, leading from one improvement to another, has already made her the envy of the world, and which will still be productive of many blessings to present and succeeding times. One distinguished political writer has suggested, that in every government there ought to be a minister of health. Be this as it may, I am sure that London admits of considerable improvement, in reference to the prevention of malaria, and consequently to the prevention of typhus fever.

It is a singular circumstance, that when I first settled in London, the current opinion among the profession was, that typhus fever originated solely in human contagion, and it is remarkable that it should have been reserved for me to discover that mistake in this metropolis. But the discovery, from what I before mentioned, was quite accidental, and I take no credit to myself for having made it, though, when I reflect upon it, it gives me great pleasure, because whatever prejudice may exist in the profession, the discovery will make its way, the truth will triumph, and prove useful to mankind. Malaria, then, I hold to be the primary source of typhus fever. That I consider as a settled question. But this question involves another, namely, does typhus fever, thus originating, ever become contagious? Does it ever acquire the property of communicating itself from one person to another, like small-pox, measles, or scarlet fever? This, I repeat, is another question, and one that requires an unprejudiced examination.

Many men believe that typhus is contagious, because they have been told so at school or college; precisely on the same principle that children take the assertions of their fathers and mothers as truths upon all subjects. A friend of mine was sitting in his drawing-room, and two of his children were playing about him, and they soon got into an argument, when one of them attempted to settle the matter, by saying that papa said it was so, and that, therefore, it must be so; the other little fellow said, but I know, that if papa said so, he was mistaken, for I saw it myself. His father looked up and exclaimed, what, you little dog, did you say that *I* was mistaken? Yes, replied he boldly, if you said so, papa, you were mistaken. Well, rejoined the father, you are a fine fellow, there is a shilling for you, and be sure always to maintain the truth. Now as our fathers and forefathers of physic have often been mistaken, we should not take their assertions as necessary truths, and since they lived in a less enlightened age than the present, we should put them to the test of the most minute investigation.

The question, whether typhus fever *is* contagious or is *not* contagious, can not be decided by any reference to black-lettered books, but by a reference to facts, and facts alone, contemplated with the most perfect impartiality. You know, that I once believed typhus fever to be contagious, but I feel it my duty now to declare, that I have lived to doubt the correctness of that opinion, and shall not decide till I have made the most extended and complete inquiry. But I can say, from a review of a great many cases, that if ever typhus prove contagious, the circumstance of its being so must be rare, and that the public alarm upon the subject is not sanctioned by what occurs in London, for I must repeat again and again the incontrovertible fact, that this affection exists in certain patches or parts

of the metropolis, almost in every parish, and yet it never spreads throughout society. It must be recollected also, that most of the poor remain in their houses till the very last stage of typhus, and consequently, if this disorder were so contagious as is generally believed, it would spread in all directions. If small pox, measles, and scarlet fever, thus existed in almost every district, and if they were thus allowed to advance to the last stage without removal into some hospital, there can be no doubt but each of these affections would be diffused, as it were, all over London. Now why is not this the case in regard to typhus fever? Why, if it be so contagious, is it limited to particular places, beyond which it does not pass? Why, I repeat, does it observe this law, so different from that by which small pox, measles, and scarlet fever are regulated? Let the advocates for unqualified contagion answer these questions.

Again, I have known a great many instances in which patients labouring under typhus were removed into a fresh atmosphere, and yet in no case did the disorder propagate itself to any other individual. Now how does this happen, if typhus be contagious? Had the cases been those of small pox, measles, or scarlet fever, they would have been communicated to many persons, provided those persons had not been before the subjects of such affections. Why does this difference exist between typhus fever, small pox, measles, and scarlet fever? Does it not show that they are, generally speaking at least, essentially different as to the capability of their being communicated? Besides, I have known wives kiss their husbands again and again, when the tongue and teeth of the latter were crusted with the sordes of typhus fever,—I have known fathers and mothers do the same thing to their children similarly situated,—I have known mothers suckle their children while they were subjects of typhus,—I have known persons in health sleep in the same bed with those sick of typhus,—and yet, in none of these cases, has the disorder been communicated. Now I ask you, once more, how such things could, by possibility, happen if typhus were that contagious affection which schools and colleges, and which those secondary and shallow intellects, who borrow their notions wholly from such authorities, would have us implicitly to believe? Perhaps we may be enabled to throw some light upon this obscure subject, upon the difference between infection and contagion, by referring to some facts observable in certain cases of erysipelas, and of fever following puncture in the dissection of bodies undergoing the putrefactive process.

I have repeatedly observed, that if the wards of an hospital be crowded with bad cases, when the air is so stagnant without as to prevent the removal of the foul air within from the fresh air without; I have repeatedly observed, I say, that erysipelas arises under such a combination of circumstances, and alone under such a combination, in the place already specified. In one person the remote occasion shall appear to be the puncture of a leech; in another, cold applied to the cheek; in a third, it shall arise from food offending the stomach, and in a fourth, it shall arise spontaneously, without there being such apparently concurring cause. In the progress of such cases, a continued fever arises, which so exactly resembles the continued typhus from malaria, that putting out of consideration the external erysipelas, it would be difficult, perhaps impossible, to distinguish it from continued typhus of marsh miasm. Though I have carefully watched the rise and progress of this form of erysipelas, which you know I call the erythrematic, by way of distinction, yet I have never known one instance of it in which it appeared to propagate itself from person to person. It occurs within a local taint or contamination of air, and persons removed from that air do not communicate the affection. On reflection, it appeared to me highly probable, that this local taint or contamination of air was the product of the odour of the stools, urine, breath, and perspiration. Assuming this to be the case, when I was physician to the Fever Hospital, I induced the committee to establish convalescent wards; and as they enabled me, while I was there, to keep the receiving wards much less crowded, this expedient, together with free ventilation, nearly proved a

preventive of the erysipelas, for I only had two slight cases afterwards during the whole of the time which I remained in that office. With respect to the low fever which sometimes follows puncture in dissecting, it also puts on so exactly the character of continued typhus from malaria, that, losing sight of the original puncture, the inflamed absorbents up the arm, and the tender glands in the axilla, in twelve cases which I have witnessed, I could not have distinctly drawn the line of demarcation. Yet in none of these examples has the disorder propagated itself, though I have noticed their progress very narrowly, and though most of them occurred among my pupils in confined situations. Moreover, GASPARD has shown, by experiment, that putrid animal or vegetable matter, introduced into the blood, occasions a fever of the typhoid or typhous character.

It would appear, then, that a fever having a peculiar intermittent, remittent, and continued character, arises from malaria, and malaria alone, as far as my observation goes; but it would also appear, that a fever of a continued form, with a typhoid or typhous character, arises, 2dly, From a local taint or contamination of air from the odour of the stools, urine, breath, and perspiration; and, 3dly, from the introduction of putrid matter, as in the case of puncture from dissection, or of the experiments made by GASPARD on the lower animals. Now does it ever happen that persons labouring under this form of fever so contaminate the air by a like miasm, or putrid product, as to affect those who approached them in a like manner? Or does it ever happen, that the clothes of persons who approach such patients are so imbued with such a miasm, or putrid product, as to give it off again, and occasion thus a similar fever in individuals previously healthy? These are questions which can only be answered by an observation at once the most minute and extensive; and though I have been so long and so laboriously attending to the subject, I must pause, must leave my mind open to the reception of future facts, and decide accordingly. In the mean time I would say, that the thing is possible, but that I have not yet met with any well antheaticated and considered facts which would justify me in drawing such a conclusion. Common candour, however, requires me to state, that I have met with some cases, a few, indeed, out of a vast many, which at first sight gave a strong colouring to the doctrine of contagion, but which, duly considered, are explicable on that of malaria. Thus, for instance, the sister of a young lady who died of typhus, requested to see the body the day after death, and, while standing over it, she became faint and sick, and had an attack of typhus. But the lady, whom I saw in a dying state, and who soon afterwards expired, lived in a house where I had traced the existence of malaria for some years; her sister, the second affected, had also lived in that house, and is it not, therefore, probable, that the sight of the body, by debilitating her frame, was only the predisposing cause, and that this second individual, like the first, had been exposed to malaria, the predisposing cause?

One of the porters of the Fever Hospital was attacked by typhus, and an excellent physician told me, that this surely was a convincing proof of the contagious nature of the disorder. But I replied, that this porter had been almost daily in districts where malaria prevailed, and it turned out, in investigating the case, that it had the character of a quotidian ague a week before it put on the continued form, thus showing, that it had arisen from malaria. Nurses about the hospital are occasionally attacked, and especially those who wash the clothes of the sick.

In allusion to the influence of smells, I may mention, that I have seen individuals who, being debilitated by disagreeable odours of a *common* nature, were seized, some by intermittent, some by remittent, and others by continued typhus; and in such cases we can only suppose, that the disagreeable odour of a *common* kind had been the *predisposing* cause, since the symptoms which arose were those of a *peculiar character*, such, in a word, as arise from malaria or marsh miasm.

Confinement within the walls of a hospital is a powerfully predis-

posing cause to some, and the hospital stands in one of the malaria districts, to the influence of which its inmates must be occasionally exposed in passing to and from the hospital. I might assume, with as much show of truth, that this theatre is a focus of contagion, and might apparently prove it, by saying that many of my pupils, far more than the proportion of the inmates of the Fever Hospital, are attacked by typhus; but the fact is, that many of my pupils are broken up by hard study; and lodging in one of the malaria districts, the Borough, they become predisposed, and being exposed to its influence, they are attacked. But though their friends wait upon them affectionately, as nurses, I have never known any of them receive the disorder from the sick. Upon the whole, then, though I would not take upon myself to deny, in the present stage of the inquiry, the possibility of typhus being contagious, yet I have become more and more sceptical on the subject, the more minutely I have inquired into facts. Many men, it is true, make confident declarations, and say that typhus has spread from such and such a family as from a focus; but wherever I have had an opportunity of investigating the matter on the spot referred to, it has happened, either that the evidences of malaria were distinct, or that the drains were in such an imperfect state as to produce a local taint or contamination of air.

What formerly deceived me, and what still deceives many persons is this, that one, two, or more individuals may be attacked in the same house. But if one case arise from malaria, why not another and another? And where this is the case, generally speaking, we have grounds for inferring that malaria was the primary source, because, on minute examination of the testimony, it will be found, that some cases in the commencement assumed an intermittent or a remittent character.

The doctrine of contagion has been productive of one great practical evil in London and elsewhere. It has withdrawn the attention of the profession, of the public, and even of the government, from the consideration of its primary source, namely, malaria, and has led them to trust to fever hospitals as means of prevention. But if my observations be correct, fever hospitals are of little or no utility in a preventive point of view, especially those which receive patients in the last stage. Indeed typhus obeys moral and physical laws to which the governors of such establishments do not at all advert, and how can we expect them to be useful in a preventive point of view? So certain am I in the truth of the doctrine of malaria, and a local taint or contamination of air, that I believe, with the aid of the Legislature, I could go far to annihilate typhus fever in the British metropolis, where many substantial improvements might be made in reference to this subject.

The doctrine of contagion is so influential, so pernicious in its unqualified application, that it ought to be sifted to the very bottom. By alarming the healthy, it powerfully predisposes them to the operation of malaria and other subtile agencies; it renders the attendants often so selfish, that they sacrifice the sick by sending them to hospitals at so late a stage that the fatigue of the removal destroys all reasonable hope of recovery; it alarms and debilitates the sick themselves, and in that way often destroys them through its mental irritation and depression. It has endangered the welfare of whole cities, as of Alicant, where military lines were drawn round, so that the inhabitants could not leave their homes, but were compelled to breathe the local taint or contamination of the atmosphere there. Nay, it may endanger the very liberty of a country, to say nothing of commerce, as recently happened in Spain, where the doctrine of contagion was made an infamous pretence of gathering together that French army which advanced, more fatally than any contagion, and crushed the rising liberties of Spain, and restored all the horrors of an unrestricted despotism. You would do well to ponder upon all these things. You would do well to pause before you admit the doctrine of contagion, since it involves such momentous consequences, private as well as public. Above all, let me advise you, as you value your own approbation, the health and lives of the

public, and the advancement of your profession,—above all, I repeat, let me advise you to examine into the question through facts, uninfluenced by any prejudice towards others, or by any partiality to myself personally.

In my next, I shall consider the symptoms, morbid anatomy, and treatment of typhus, and shall, at the same time, endeavour to show the identity of that affection and what are commonly called yellow fever and the plague.

(Loud applause followed this long and excellent lecture.)

LECTURES

ON

PHRENOLOGY,

BY

DR. SPURZHEIM.

LECTURE 6.

LADIES AND GENTLEMEN,

I have spoken hitherto of the animal propensities, and there remain three to be considered.

Secretiveness.

Among the different characters found in society, there is one distinguished by the name of cunning. It is not always that persons excel by judgment, persons may be very cunning and have but little judgment. It is difficult for such persons to give direct answers to questions, they will turn the point, if they can, by evasion, and in speaking with them you must insist upon the argument to induce them to pay attention and to answer you; they prefer to tell lies. (A laugh.) Some individuals are exceedingly fond of intriguing, and they are fond of shifting; they turn with the wind. If ever you have to defend an opinion they are ready to join you, and do as you do, and if you alter your opinion they alter their's. Hence, observing this versatile disposition in some individuals, it was very natural to be attentive to the organization of the brain, to see whether it corresponded with the actions observed, and we observe that a very intriguing fellow, who plays a double character, will often succeed well in the world. There are some individuals without great merit who know how to find their way through life, they know how to play off to the greatest advantage; whilst others never succeed, they fail in every thing they undertake. GALL was attentive to the organization of such characters, and he found that they were broad above the ear, above the organ of destructiveness. This (showing a cast) was an individual of the character I have described; if you look at the configuration of his head you will find that it is broad here, at the middle, and on the side of the head above destructiveness. This individual (showing a cast) belonged to a good family, a very respectable family, he spent a great deal of money, and then to get more he deceived all his friends; he borrowed large sums of money of one and then of another, but no one person thought he had borrowed of a second; he obtained a sum so large, and having spent it all, he could in the end, pay nobody, and thus he was discovered. DR. GALL found very cunning individuals always very broad here, and he called it the *organ of cunning*. If you examine cunning individuals you will find that they are broad here, laterally. Individuals in different countries who are cunning you will find broad here. However, shall there be an organ of cunning? I will give you my opinion. In order to be cunning, we must possess a certain quantity of intellect, and the feelings I have hitherto spoken of are without intellect and blind, and I have stated that they are blind because they produce a determinate impulse without the exercise of judgment. To be cunning is also natural, but persons do not like to be considered cunning although nature appears to have given a propensity. What then is the fundamental power of this organ? If you reflect on the actions of men and animals, you will find that there is a peculiar instinct to hide and conceal; an instinct which is very necessary and important to animals. Many escape from their

enemies by hiding themselves, as the fox, being pursued, he runs into a hole and hides himself. Many other animals do the same to obtain their prey; the cat, when watching for a mouse, contracts her body into as narrow a space as possible, and moves in a very peculiar way. Cunning persons always try how to conceal their motions, every thing they do is concealed and kept secret. An individual may conceal his intentions to do good, but he may also conceal them to do mischief; if he do mischief we call him an intriguing being, but if he do good then we call him a prudent man. Thus, the name is given to the application of the power, but in phrenology we must try to find out the fundamental power, not the result of its application, because that very much depends upon accidental circumstances.

The instinct to conceal is active in animals and in men. Look at children, you will see some very active in concealing any thing they meet with. We see that some animals not only conceal themselves, but their provision. If a dog finds a bone, after he has satisfied his appetite he will conceal it until a future time. Indeed, you will find, in animals and in men, that to conceal is a fundamental power. Tell one man a secret, and he will keep it; tell another, and he will repeat the secret to every body. Some will make presents to their friends, but will do it in a very concealed way. So, in a general way, we find that it is a fundamental power and one that is very necessary, its organization is quite ascertained. Whenever I find this part large (No. 9), I know that the individual has a great tendency to conceal, but I will not say to what purpose he will apply it, whether to a good or to a bad purpose. There are some individuals who will sometimes tell you things, known to every one, quite in a secret way (a laugh), and in them you will find this individual part much developed. Whenever you see heads of this kind (showing three or four), you may rely on the person being very secret. You must not expect that such an individual would always say what he means. (Having the organ large.) The organ then may be observed, and we call the power or feeling among mankind slyness, and in animals cunning; but I prefer the term *secretiveness*.

Acquisitiveness.

I come now to the consideration of another power, which has done harm to phrenology; it has been made quite the scape-goat, for all persons have spoken of an organ of theft, and it required great courage in Dr. GALL to show that there was an organ of stealing. There are thieves in all countries, and individuals who have a great inclination to steal. Characters of the first kind, or the thieves, we know exhibit great dexterity in contriving to accomplish their purpose under a variety of circumstances, and among the latter we know that persons of good education and good families have yet shown a peculiar inclination to steal. It must have come under the notice of every one present that there are individuals among the rich and the poor who do not want to steal, and yet exhibit the greatest pleasure in stealing. LAVATER speaks of a physician who used to steal anything he could lay his hands upon from the rooms of his patients. A lady of fortune used to take a great pleasure in visiting shops, and she contrived to steal something from every one, and her friends used to send persons with her to watch, and afterwards to restore the articles. These are positive facts. We see among idiots this propensity very strong, for although they may have their pockets full of bread or other eatables, they will go on to steal. In insane persons we find this instinct to steal sometimes strong. Unfortunately, there are too many persons who have a propensity to steal, and Dr. GALL, observing such individuals, found the cerebral part hereabout much developed. I can show you many examples, they are not scarce. This is the part of the brain where the organ is situated (showing a cast) here, anterior to secretiveness, (it is marked No. 8 on the model cast.) Here is the cast of the head of a man who first cheated his friend and then murdered him (showing a cast); here is another who did the same, Patch. We have observed many facts of this kind, and it is positive that the greater

number of such persons have the brain large in this region.

We must now reflect on this power a little; we see that such actions as I have mentioned do take place, although we have the law given expressly on the point morally and politically, "Thou shalt not steal," yet we find that some persons will steal. However, we shall not admit that there is a peculiar power for stealing, but we observe thus much, that persons who are very active in that way, and who show a great propensity to steal, have this part large, but we do not say that every one who has this cerebral part large shall be a thief. No; this is an organ which is very large in mankind, and it is the cause of infinite mischief; there are few organs to which a fundamental feeling is attached which do so much harm as this. It is this feeling which separates mankind one from the other, and nations from nations, it is the propensity against which Christ himself was so severe. Look at an individual in whom selfishness is a very prevalent feeling, talk to him about charity, and he will say, "Charity begins at home;" he will place his personal interest above every other consideration; he cannot conceive that any person can be gratified without getting something by it. In individuals who in an honest manner from infancy try to become rich, to acquire riches, you will see this part much developed. It is a power absolutely necessary for existence; if we wish to exist, must we not take care for our subsistence? Animals make a provision for the winter, they do it by instinct, as it is said, but you will not only see this feeling among the lower animals; you will see persons who are very fond of bringing things together, they are not satisfied with collecting what is merely necessary, but as the organ of destructiveness is sometimes so powerful as to cause the animal to kill more than is necessary, so the organ of acquisitiveness induce persons to bring together more than is necessary, being never satisfied, and in such people you will always find these organs large. There are certain species of animals, as magpies, that take away and collect what they have no necessity for, as spoons and glistening things of any kind, and will conceal them. There are some dogs who appear to think that stolen meat is always better than that which is given them. We admit then, as a fundamental power, that which gives the *desire of acquiring, or collecting*, and in phrenology it is called *acquisitiveness*. It does not determine the objects to be acquired, or the means of acquiring them, the choice of objects in which this feeling is to be exercised depending upon other powers. People generally try to acquire money, because that will procure all other things; but it is peculiar that, in the application of this power of acquisition, some will, like the magpie, collect together things which can never be of use to them. A gentleman at Vienna had collected together a great quantity of things into one room, things which he never could use. It is very interesting to contrast these two examples of the development of this organ: Now in which do you think acquisitiveness is the largest? (Showing the casts, in one of which the organ was much more developed than in the other.) Which do you suppose of these would gain by a bargain? (Contrasted with this, was the cast of an unfortunate female, who, even in her reverse of fortune, declined to accept of more than she considered necessary for her existence.)

I hope, then, that you will have no objection to acquisitiveness. What would mankind be without acquisitiveness? But, whether you gain by industry, or by stealing, whether by commerce, or in any other way, that does not depend upon this individual power, but upon a combination of powers. This organ gives the instinct only, the propensity or power of wishing to get. If you find an honest man who has made his fortune with a particular desire to get rich, you will find the organ large in his head. When we speak of stealing, we must admit that legislation has drawn a distinction, and fixed arbitrarily certain regulations for the public good, but legislation does not destroy the power of selfishness.

Look to animals, there is no tenure by which property is held among

them but by force. We see that among the birds, the storks will fight with their neighbours to try to gain possession. A stork comes back every year to build in the same chimney, and will allow no other to build there. We know that in certain districts there is only a certain number of birds of prey, and they will allow nothing to come into their estate, they will fight with them, and drive them away. Even the chamois, which feed in herds, one herd will not allow another to feed on the same mountain. There is a feeling, then, which leads us to acquire and to collect.

Constructiveness.

We come to another point; in animals we see an instinct which leads them to build or construct; birds especially build their nests, some in trees, others in holes, and show great skill in the manner in which they do so. Among mankind we observe a disposition to build; some men show a great disposition to architecture, to become architects, and the question is, whether there is a natural disposition to do so, independent of a combination with any other power? There are children who sometimes show a particular talent for the mechanical arts, they invent machines, and sometimes they are prohibited from exercising their talents, and punished for doing so. As we see in schools, if a boy will draw when he ought to be reading his lesson, he is punished. If you observe persons who excel in drawing, and show any talent for invention, you will find that they are differently organised from others in this spot here. Look at this head, you observe that it is large just behind the external angle of the eye. Anterior to secretiveness is acquisitiveness, still more anterior than acquisitiveness is an organization which gives the power called *constructiveness*; it is the power I now speak of. This is the cast of the head of a boy only eight years old; he had the talent of imitating in paper the figures of whatever he saw; you observe how broad it is here (pointing to the part). Here is the cast of a person who was punished for his talents, and he ran away to satisfy his talents, and you see the organization is very full in this part. Do you think that such a person (showing a cast very flat in this place) would show a great talent for construction? Shall we find the powers of constructing in the arts different in different nations? You will find this part more developed in the French than in the English. If you observe persons in the streets of Paris, you will observe the organization large, generally speaking. Here are two French skulls, you see that this part is full, not that I would draw any inference from them that the heads of Frenchmen are so generally, I give you the remark in a general way. If you observe in common life persons showing great dexterity in the use of instruments, as mechanics in the use of their tools, you will find this cerebral part well developed. Many mechanics can devise very ingenious things, but they have not the power of carrying their inventions into effect, they must have others to manufacture for them, because they have not the power I speak of. As far as manual dexterity is concerned, you will certainly find a greater number of persons who possess it in the French than in any other European nation. Here is the head of a person who had the power of putting a few things together ingeniously; she was a *marchande de mode*, one of those people who, by constructing bonnets, give the fashions all over the world. (A laugh.) You see she has this organ large. From the many observations which have been made, the situation of the organ may be considered as certain. It is situated behind, and a little above the external angle of the eye, and it is situated in this country a little higher up than it is abroad, for this reason, when the cheek bones are narrow and contracted, the organ is situated a little higher up than it is when the cheek bones are very prominent, because all anatomists know that the cheek bones form a part of the orbit externally as well as below. Hence, then, a distinction would be necessary, if we spoke of the situation of the organ in relation only to the external angle, but in phrenology we never confound the face with the brain. It has been often said, that Voltaire had a small

head, but the truth is, that he had only a small face.

This is a cast of what is considered the true skull of RAPHAEL; I know there has been some dispute about it, but it is considered in Rome to be his skull, and I can only say, that you might examine thousands of skulls and not find one presenting such organization indicative of the mental powers which, from his works, Raphael must have possessed. The cerebellum is very large, and the organ of construction is very large—organizations essential to a fine painter, added to other powers; but our opponents cannot conceive how we can compare the organs of such sublime conceptions as those of Raphael with the head of a Marmot. I do not say that a Marmot has the same extent of powers as Raphael, but combined with other powers, construction, which is fundamental and acts as instinct in animals, gives rise to a particular application of the higher faculties.—The power of construction is one thing; but whether a person possessing it will be an artisan, a painter, or an architect, is another; you must never confound the power with its application. There are the several powers called *propensities*.

SENTIMENTS.

I come now to other feelings, which have certainly claims to be considered more than mere propensities, and I wish to speak of two of them to-day. These have a great influence on mankind, and they have been considered as factitious. If you will observe phrenology, you will be convinced that it is easy to prove that they exist fundamentally in nature, and yet that they depend upon the brain. I should wish any one, who does not like phrenology, to reflect on these two, as I am sure that they are as great obstacles to morality as extreme selfishness, and the Christian code is very severe against them, and whenever that is the case, you may rely on it that there exist strong fundamental powers.

Self-Esteem.

Do you think that pride exists naturally, or that man can be proud from nature? It is quite astonishing that philosophers have not more insisted upon the fundamental nature of pride. We are told that the first man fell from pride, and we shall find throughout mankind the feeling very strong. I admit a fundamental feeling which gives to man a disposition to have a good opinion of himself; make that feeling a little stronger, and then it is called pride.

Take it up then as pride, the feeling in a higher degree, and you cannot deny its existence. There are those who maintain, that such feelings are the result of society; that if in society any one has great natural talents, or if any one without the possession of such talents acquire a great influence on society, such an individual will be proud. But is every man of talent proud? Some are—others are not; these circumstances then, the possession of talent, and the influence of that talent on society, do not produce pride. Some very inferior persons, poor and having no talents, have a very high opinion of themselves. Others have again said, that great talent gives humility, but I do not admit that as a cause; I consider the feeling as fundamental. If you know an individual in any profession who knows a thing better than another—if he knows better how to give medicine, if he be a medical man—or if he knows how to give a better interpretation, if he be a metaphysician—if he thinks he can do them better than any body else, and if asked his opinion will say, I have not examined, and have not made up my opinion, and therefore the matter cannot be settled, you may be sure this organ is large in his head. There are people who speak in a very positive way, and who have greater opinions of themselves than any other persons, you will always find this part of the brain much developed. You may go through sexes, and families, and nations, and then you will decide as those have who have already done so. You will find throughout each, that such persons as place their opinions above all others, and have great notions of their own worth, are high here, at the vertex (the upper and back part of the head); it is the organ of the feeling of *Self-esteem*, and in a higher degree—*Pride*.

This power is very necessary, it preserves individuals from lowness of mind; I cannot conceive a noble mind to be without some self-esteem, or self independence. We have no hesitation as to the seat of the organ; it is here, and you may see it large. Some nations manifest much more self-esteem than others, and in individuals it manifests itself in a good or bad way, so that we can speak very positively of the power. A very rich man, in Paris, a man worth millions (of francs) shut himself up in a little house near the Palais Royal. On the contrary, you will see that the feelings of individuals, who are sunk much in that part, are meek and humble, whilst those who like to command and to take the lead, to be the first in any thing, have the part largely developed. You see the feeling among boys, those who will play at soldiers; some will never consent to be common soldiers, they must be captains, or generals, and those who have the feeling strong are also fit to command. You will understand this feeling better if you consider another at the same time. The neighbouring parts are sometimes larger, and these combinedly have a great influence upon society. You may have the organ of self-esteem well developed, but you may have the lateral parts, the parts on each side, still more developed, and when that is the case another strong power is brought into action. I speak of a fundamental power in phrenology, which is called the

Love of Approbation.

This feeling is very evident among children, and it is encouraged in the schools under the name of *Emulation;* there we make use of it for an excellent purpose. If you notice the organ full in children, you may depend upon it that they are fond of approbation; the feeling being called forth is said to be the love of glory, but whether the love of approbation be considered in a general or in a slave it remains essentially the same. Hold out some public honour to men and they will do any thing, no matter whether it be the gift of a pebble, a bit of metal, or a ribbon. Some men will do any thing to have a *ribbon.* (A laugh.) I might be severe, because we may notice the errors of all nations founded on this anxiety to be distinguished from others by some external distinction. Combined with other powers, self esteem and the love of approbation do good in society. Does a man do good and wish to keep it a secret? No, he wishes every body to know it. I do not blame the feeling, because I cannot expect to limit it by the rules of philosophy; it is often productive of great good; it is a very active feeling in mankind; the desire of being noticed publicly is very great. If a man wished to be remarked by the world he would, EROSTRATUS-like, put fire to the Temple of Ephesus to obtain it; * he would rather be pitied than be unnoticed. Some persons will do any thing provided the world will notice them, and in such persons you will always find this cerebral part large. Sometimes both this organ and the one I before described are large; look at the different bumps, as they are called (a laugh), in inhabitants of different countries, and you will observe great differences. You find great difference also in the sexes, particularly in the young; you may talk to boys and point out the value of what you tell them, and say, what will people think of you if you do not learn? but they will not pay much attention; but if you observe in girls their lateral parts large, they will be attentive to what you say, and you can make use of this feeling to instruct them, and if you appeal to the opinions of others as motives for excitement they will be very attentive; they will ask, "what will they say of me?"

The feeling produced by a combination of these powers, very largely developed, is very curious. I have never seen an individual who had them both large who was satisfied with the world. Such a person thinks that the world has not done so much for him as he deserved; he imagines that he has deserved very much more than the world is inclined to remunerate him with. Some people are very touchy, and

* The famous temple of Diana, at Ephesus, was burnt by Erostratus, on the same day that Alexander the Great was born.—ED. L.

even sometimes among labourers, the lower classes of society, the love of approbation is so strong, that when they are drinking together the one who has felt his consequence much hurt will even stab his fellow labourer. In looking for this organ you will not always find it very elevated, but it is generally very broad in the characters I have been describing. I give the feeling as fundamental, and the organ as quite certain.

The doctor then briefly recapitulated, and exhibited the casts of several persons known to possess this feeling in considerable activity.

REVIEWS FROM THE WEST.

Practical Precepts on Injuries of the Head. By A. COLLES, one of the Professors of Anatomy and Surgery in the Royal College of Surgeons in Ireland. Dublin, 1824.

AT the close of the winter course of lectures at the R. C. of Surgeons in Ireland, 1824, the following Tract, on Injuries of the Head, was printed at the author's expense, and distributed by him, gratuitously, to his pupils. An offering of friendship from a professor to his class, more than an elaborate display of knowledge intended for general circulation, can hardly be said to be a subject for criticism. Censure, even if deserved, would, we think, be out of place, when applied to a production under such circumstances; but, in truth, no such delicacy is required, in speaking of this little work, for though small and unpretending, it really contains as much useful information as will be generally found in more voluminous treatises on the same subject. Those who have heard the writer's lectures will easily discover a deep tinge of his mind and manner in these pages, his phrase naturally assuming the aphoristical form, of all others, perhaps, the best suited to medical composition. It is much to be regretted, that a man who possesses such ample opportunities of observing and investigating disease, in all its varied forms, should not favour the world with the *opima spolia* won in a long and well-fought campaign of the most extensive experience. The materials of a use work we know he possesses; but his earlier productions having met with rather a *warm* reception from the critics, we believe he has come to a determination not to venture his hand once more in the wasp's nest. No such consideration should deter him from the performance of a duty which his acquirements so well qualify him to undertake, and which his situation in life, as a public teacher, in some measure demands of him to execute. Should not the example of men in similar circumstances stimulate him to exertion? Had the energies of a COOPER been confined to the handicraft of his profession, narrow indeed would have been the sphere of his labours, while his writings have made the latest posterity his debtor. We must conclude this notice abruptly, in order to make room for the subject of it, which we shall insert entire; assuring our readers, that our pleasure, in rescuing this little tract from oblivion, is not greater than our approbation of the amiable motives in which it originated.

"To the Pupils of the Royal College of Surgeons in Ireland.

Gentlemen,

The following little work, on Injuries of the Head, has been compiled with the view of facilitating the study of a subject at once difficult and complicated. I request you will accept of it as a mark of my sincere esteem and a return for your kind attention.

Believe, gentlemen,
Your sincere friend,
A. Colles.

Introduction.—The plan of this little work has been borrowed from a similar publication, by the late Mr. Dease, the first Professor of the Practice of Surgery in our College. I have ventured to make considerable alterations in the arrangement, and such additions to the matter as have been supplied by the present improved state of surgery. I have made Mr. Dease my guide, because every man who has read his larger work, "Observations on Wounds of the Head," must see that the principles which he there inculcates are now received as established truths, and are acted upon as rules of practice.

Injuries of the Scalp.—*Contusion.*—A blow of a blunt weapon, in general, detaches the scalp from the pericranium. The separation takes place to a greater or less extent around the seat of the injury. Into the receptacle thus formed, and also into the broken cellular substance which surrounds the cavity, blood is poured from the ruptured vessels. There is danger of mistaking such an ecchymosis for a depressed fracture, because the border of it, raised and hardened by the blood which is impacted amongst the cellular substance, resembles the elevated circumference of a depressed fracture; while the central part, soft and yielding, allows the finger to sink apparently below the level of the scalp. If you open such tumours in an early stage, you will induce a high degree of inflammation and fever, which will be followed by suppuration of a very bad character. By means of cold lotions applied to the tumour, by the antiphlogistic regimen and quiet, the extravasated blood will generally be absorbed in the course of ten or twenty days. If at the end of ten or twelve days the tumour should continue undiminished, especially if the integuments should begin to inflame and point, you may then make an incision sufficient to give exit to the blood; after which keep the parts in apposition by compression and bandage, and they will quickly unite.

Wounds.—Simple incised wounds of the scalp are to be treated as similar wounds in other soft parts; they will unite by the first intention. If the bone be so cut that a scale of it be raised along with the flap of the scalp, replace the parts, and treat the wound as an incised flap wound of the scalp only; such a wound frequently heals as if it were a wound of the soft parts. In lacerated flap wounds of the scalp, replace the flap and retain the parts in apposition by gentle compression, with bandage, &c. &c. The contused wounds, if small, approximate the parts, but do not bring them into very close apposition, because a greater or a less degree of suppuration and sloughing must follow. Contused flap wounds are to be treated by laying down the flap after you have endeavoured to wash clean the surfaces. As soon as the process of sloughing is finished, bring the parts into the closest apposition, and retain them in that state by adhesive plaster and bandages. Should you dress the surface of the wound and the flap separately, the flap would, from day to day, become more thick, more unyielding, and more narrow; so that when you wish (after the process of sloughing) to draw the flap over the surface from which it had been raised, it will leave more than one third of that surface uncovered. Punctured wounds of the scalp are to be treated as similar wounds in other soft parts. This class of wounds is sometimes followed with a circumscribed painful swelling, accompanied with inflammatory fever; these consequences arise from the inflammatory tension of the aponeurosis, and are most speedily removed by dilating the wound of this membrane. Erysipelatous inflammation, with fever, is not

an unfrequent consequence of wounds of the scalp, arising, however, rather from constitutional than local causes. The treatment should be the same as for erysipelas attendant on wounds of other parts. The event sometimes proves fatal. On examination, after death, no traces of inflammation of the brain, or any other disease of that organ, can be discovered. In wounds of the scalp, generally speaking, the antiphlogistic regimen should be enjoined, not merely to moderate the local inflammation of the integuments, but also to guard against the more serious danger of the inflammation of the internal parts.

CONCUSSION AND EXTRAVASATION.—The primary, or immediate constitutional symptoms of injuries of the head, are loss of sense and voluntary motions, stertorous breathing, slow labouring pulse, involuntary discharge of urine and fæces, &c. Every possible variety occurs in the violence and duration of these symptoms, from a slight stunning to absolute and almost instant death. The intensity or duration of the symptoms is by no means proportioned to the force of the blow, or severity of the injury. Dissection discovers two different states of the contents of the cranium in those who have exhibited the above symptoms. In some, blood has been widely found spread on the pia mater, over one or both hemispheres, or extravasated into the ventricles, or about the base of the brain; while in others, we discover no effusion, no rupture, no disorganization of the brain; the only remarkable appearance which presents itself is, that this organ seems not to fill the cranium completely. This latter class of patients are said to have died of concussion of the brain; the former class, of extravasation. The same train of symptoms occurs in both these forms of internal mischief. The same line of treatment is applicable to both. In case of recovery, these symptoms in general slowly retire; the sensibility and voluntary motion gradually return. In a few instances the patient suddenly recovers possession of his faculties. Venesection, repeated if necessary, purging injections, purgatives by the mouth, and occasional blisters, should constitute the plan of treatment.—When the symptoms begin to yield, we may entertain good hopes of recovery; we must not then repeat the evacuations in too quick succession. Should this plan of treatment prove unsuccessful, and should the condition of the patient become more and more alarming, we may then think of applying the trephine; for in some few cases it has happened, that by the blow the dura mater had been detached for a wide space from the cranium, while at the same time a fracture of the internal table had torn the middle artery of the dura mater, or some one of its sinuses, and thus a large quantity of blood had been collected between the membrane and the skull. With the faint and uncertain hope of finding such an extensive separation, and such a large collection on the surface of the dura mater, we should apply the trephine. In general, however, this operation affords but little chance of relief, because the effused blood lies not on the surface of the dura mater, but is widely spread over the pia mater, and tenaciously adheres to that membrane.—Whenever the usual symptoms of concussion and extravasation are combined with epileptic fits, spasms, or convulsions of any of the muscles of the face, carefully examine whether there be not a fracture, and whether a splinter of bone has not wounded the dura mater. In a few instances of injuries of the head, the patient is affected in a manner very different from that described in the beginning of this section. He has a wild look, talks much, frequently gets out of bed, has a tendency to vomit, his pulse more than naturally quick, his breathing neither slow nor stertorous.

INFLAMMATION AND SUPPURATION WITHIN THE CRANIUM.—Patients who have suffered from extravasation or concussion of the brain, may, after the removal of all the symptoms attendant on such mischief, be seized with symptoms of suppuration within the cranium. The probability of such a consequence is not to be estimated according to the severity of the original injury, for suppuration has fol-

lowed injuries of the head in which no wound of the soft parts, no fracture of the skull, had taken place, and where the symptoms of concussion had been very trifling and very transitory. On examination after death, we generally find a small quantity of purulent matter lying (at the site of the blow) on the surface of the dura mater. When we raise this membrane, we find nearly the entire surface of the hemisphere covered over by a yellow purulent fluid, which adheres so tenaciously to the pia mater that very little of it will flow off; indeed the colour and consistence of this fluid would lead us to suppose that it was formed of a commixture of pus and coagulated lymph. Nausea, thirst, head-ache; quick, full and hard pulse; restlessness, pain, and corded feel of the head, are the constitutional symptoms said to be indicative of this mischief. The local symptoms in cases without a wound are, a tumour of the scalp, puffy and tender, but not painful to the touch. In cases accompanied with a wound on the surface, which had been healthy and granulating, will become pale, glassy, and flabby; instead of good matter, it will only discharge a thin discoloured sanies, the dressings will stick closely, and the pericranium, instead of adhering firmly to the bone, will separate from it, and that even to some distance, around the edges of the wound. The symptoms indicating suppuration within the cranium never appear at an earlier period than the sixth day; generally between the eighth and twentieth days. We are not, on this account, to conclude that the inflammation has only begun at this period. Dissection has proved that matter has been formed within the cranium, so early as the third and fourth days; so that the above symptoms mark not so much the commencement of the inflammation as the disturbance which the system suffers from the matter formed within the skull. To avert this inflammation and suppuration, we must take our measures from the very first day of the injury. Bloodletting largely and repeatedly employed, according to the condition of the patient, with a strict attention to the other parts of the antiphlogistic regimen, constitute the means most likely to succeed with the generality of patients. The trephine should never be employed as a means of preventing inflammation of the brain and its membranes. Rigors, fever, and the other symptoms said to denote internal suppuration, may arise from a wound in some other part of the body, from inflammation and tendency of the bone to exfoliate, or from the ordinary causes of fever; therefore be not too hasty, on the first appearance of such symptoms, in applying the trephine. Search well for every other cause which may have excited the present disturbance in the system; use the means ordinarily resorted to for the relief of febrile symptoms; and if, notwithstanding these attentions, you perceive an aggravation of symptoms, then have recourse to the operation. This operation must necessarily prove unsuccessful in the majority of cases, because the inflammation is diffused, and the fluid is spread on the pia mater, not on the surface of the dura mater, as had been formerly imagined. In a few instances, however, the matter is formed in a circumscribed spot on the surface of the brain, with adhesion between the dura and pia mater, and occasionally with a splinter of bone forced through these two membranes into the substance of the brain. The early application of the trephine will save such patients; but if it be too long delayed, this operation will, even in such cases, prove ineffectual, because the matter of the abscess, being pent up, will irritate the adjoining portions of the brain, and will give rise to the diffused inflammation along its surface. Should the operation fail of bringing the wished-for relief, and only a small quantity of matter be found on the exposed dura mater, we shall have neither any certain guide to indicate the presence of fluid lodged beneath this membrane, nor any strong encouragement to divide it. Should the desperate condition of the patient urge you to this measure, you will only perceive a very small quantity of serous fluid to flow through the opening. After the operation of the trepan, the integuments should be laid

down again, but not brought into such close apposition as to prevent the escape of pus. The constitutional treatment must be regulated by the particular circumstances of each case. When fungus of the brain shoots up, pressure will not restrain it. Removing it by ligature is ineffectual—by incision, mortal.

On Fractures of the Skull.—Simple (undepressed) fracture of the skull is not productive of any symptom or condition, by which, when the integuments remain entire, we could be certain of its existence. Blood issuing from the nose, eyes, and ears, affords a strong presumption of fracture passing across the bones which encompass these organs. In simple fracture, accompanying an incised or lacerated wound of the scalp, we are particularly required to bring the lips of the wound into close apposition, and procure their speedy union. To trace the extent of a simple fracture is equally unavailing and unnecessary, for such fractures too often pass from the top, or sides, to the base of the skull, until stopped by the foramen magnum; and surely the fracture, if left covered, is more likely to unite without much inflammation than if it be exposed to satisfy an idle curiosity. The early application of the trepan to a simple fracture must tend to excite, rather than to avert, inflammation of the contents of the cranium. The constitutional treatment of such injuries should consist in the most sedulous employment of the means calculated to prevent inflammation of the brain and its membranes.

Depressed Fractures.—The symptoms of compressed brain do not correspond in severity with the size of the depressed portion of bone, or the depth to which it is sunk. In severe injuries of this kind, the symptoms are comparatively slight and of short duration. If the case be not urgent, we may postpone the attempt to elevate the depressed piece, until symptoms of inflammation begin to show themselves. Many such cases have had a complete recovery, although the bone remained depressed. In depressed fractures attended with severe symptoms of compression, we must quickly raise the depressed piece to its proper level. This, in very open fractures, can be sometimes accomplished by the elevator alone. Where there is not room for this instrument, or where the form and circumstances of the fracture require the removal of some part of the skull, we should apply the trephine to such parts, and in such manner as will facilitate the elevation of the bone. In general we shall find it of advantage to make the trephine comprehend the border of the fracture. Mr. Hey's saws will be found of great advantage in removing the edge of these fractures, when of any considerable length. If any depressed piece cannot be prevented from wounding and irritating the dura mater, or if it be perfectly loose and have lost all connexion with the surrounding parts, so as to be incapable of re-union, such piece should be entirely removed. In very small depressed fractures, (such as may deserve the name of punctures of the bone,) where a depressed bit of bone is sunk into the brain, it will perhaps be prudent to postpone the operation for a few days; for, if the operation be performed immediately after the receipt of the injury, and if we attempt to seize the depressed fragment, the first touch of the forceps sinks it still deeper into the brain; portions of the brain, from its softness, rise up, and conceal the bone from our sight and touch, whereas if we defer the operation for a few days, we give time for the adhesive inflammation to take place; this circumscribes the depressed piece, hardens the spot of the brain, and thus enables us to lay hold of the bone more easily and certainly. The older surgeons prohibited the application of the trephine to certain parts of the skull; but when the circumstances of the case require it, we should not hesitate to apply it even to those prohibited parts. Wounds of the brain must be treated on the same principles that regulate our practice in the treatment of the other injuries of the head."

FOREIGN DEPARTMENT.

ANALYSIS OF FOREIGN MEDICAL JOURNALS.

REVUE MEDICALE—MARS.

General Report of Diseases observed at the Hotel Dieu, in the Clinical Wards of Professor RECAMIER *during the last year.*

The number of patients admitted into the clinical wards of the Faculté during the year 1824, amounted to about five hundred and thirty-six, of which number three hundred and thirty-four were males, and two hundred and two females. Of these sixty-six have died, fifty-seven of the former, or near one-sixth of the number, and nineteen females, that is rather less than a tenth of their number. Of the five hundred and thirty-six patients admitted, four hundred and eight laboured under acute affections, of whom forty-two died, that is in the proportion of one-ninth, whilst of the hundred and twenty-eight others who laboured under chronic diseases, thirty-four were lost, or a little less than a third.

From these general results we observe,—1st, That the mortality has been much more considerable among the men than among the women. This may be attributed to the greater severity of the diseases among the former. 2dly, The mortality has been much more severe in the chronic than in the acute cases, almost double, and was generally owing to the very advanced stage of the affection when medical aid was first solicited. On the other hand, if we take a survey of the nature of the diseases which have reigned during the greater part of the last year, we shall see that affections of the alimentary canal have been most common, and more so than those of inflammation of the respiratory organs. Rheumatic complaints have been most in frequency, and after these diseases of the encephalon, of the skin and of the organs of generation; then come intermittent fevers, affections of the bladder, of the heart, and of the urinary passages, as will be indicated by the following table.

During the year 1824 were admitted.	
Intermittent fevers	14
Diseases of the brain and its meninges	37
Ophthalmia	1
Diseases of the organs of respiration	118
Diseases of the heart and its connecting membranes and vessels	10
Diseases of the alimentary canal	176
Diseases of the liver	13
Diseases of the urinary passages	5
Diseases of the organs of generation in the female	16
Diseases of the organs of generation in the male	8
Cases of peritoneal inflammation	6
Diseases of the skin	26
Phlegmonous inflammations of the cellular membrane	3
Diseases of the fibrous tissues, muscular and synovial	51
Diseases of the nervous tissue	5
Diseases of the lymphatic structures (struma)	2
Diseases of the bones (gibbosity)	1
Sinile debility	4
Contusions of a slight nature	11
Diseases of a slight kind, not well defined	29
Total	535

We shall not follow the subdivision which M. MARTINET has made in specifying the varieties of each of the diseases which he has thus classed together, but shall proceed to examine the *therapeutique* which was adopted, and the alterations which have been made in this respect from the established practices.

The employment of graduated compression in the treatment of ascites by a laced bandage; the cauterization of a cancerous ulcer of the lip by the solution of the nitrate of mercury and the rapid cicatrization which followed; the complete cure of a permanent contraction of the hands and feet of a girl, principally affected by the use of shower baths, which were employed at first at 16 degrees R., and afterwards at 14 degrees; the fortunate terminations of several cases of pleuro-pneumonies, by the internal administration of tartar emetic, of from six to eight grains during the twenty-

four hours; these are points of practice which M. Martinet imagines may engage profitably the attention among the numerous measures of treatment to which the Professor Recamier has had recourse.

We may also cite in addition the equally fortunate termination of a puncture of encysted dropsy of the liver (hydatid). Great success appears also to have attended the use of galvanism in its various modifications under the management of M. Andrier. He is stated to have cured at twelve sittings an old man of seventy years of age, who had been affected for many years with asthma, which had become so troublesome that he could not at last breathe in any other position than the upright. When the patient went out of the Hotel Dieu he did not complain of the least difficulty of breathing.

Pathological Anatomy.

Many facts of a rare kind have been recorded, and such as deserve attention; let us first mention the case of a hydatid swelling in the brain, of the size of a hen's egg, developed within the posterior lobe of the brain of the right hemisphere, and which, when its outer envelope was opened, exhibited a second, which appeared just like the pellicle which is found to envelope the white of an egg. The patient in whom this cyst was found showed no symptom of paralysis in the extremities of the left side; he was only subject to violent pains in the head occasionally; and sometimes to giddiness and whirling around as is seen sometimes in sheep, indeed such an occurrence is frequent among them. We have also observed during the year a case of wasting of the substance of a kidney, although the capsule had been distended to the size of the head of an adult. Another fact which may assist in clearing up the nature of melanosis is a tubercular degeneracy of both lungs, in which the black colouring matter was so combined with different portions of these viscera, which appeared to be hepatised throughout their greater part, that the whole of the lungs appeared quite black, and at those points where the tubercles formerly existed all the appearances ascribed to melanosis were present. By which it appears that the peculiar black matter and melanosis appearances were produced by the degeneration or melting down of the tubercular masses in lungs already hepatized, and not as the result of any action sui generis. The pathology of the liver being little known, we think it may be useful to relate here an alteration of that organ as it appeared in a man who had died of an acute affection of that organ. The liver was considerably increased in size, its external colour was of a brownish green, its tissue was softened, and full of an immense quantity of little bladders, which contained a fluid rather of a yellowish green, and of the consistence of pus; in such parts of the liver as these little abscesses were not found the liver appeared to be red, hardened, and its substance converted into numerous radiated bands.

Diagnosis.

A fact worthy of remark in connection with diagnosis of the diseases of the chest is, that an *egophonie*, and that very distinct, was furnished by a patient, in whom was found, after death, a close adhesion of the two surfaces of the pleura, without any alteration in the structure of the lung. In another case it was observed, that the extremities of the left side were not paralysed when the tractatus opticus and the ventricle of the right side were pressed on by effused blood.

A case of partial amputation of the hand, in consequence of the bursting of a gun.

Bernard Trinqué, a husbandman, aged twenty-two, of a sanguineous temperament, having discharged his fowling piece, the barrel burst, by which his hands were dreadfully lacerated, but principally the left. A surgeon, who was called about two hours after the accident, found the indicator or fore finger torn up, as well as the corresponding second bone of the metacarpus. The thumb was very much comminuted, and appeared only to be held to the rest of the hand by a few fibres. The skin of the whole hand was very much scorched, and it

was only over the extremities of the third finger that the teguments were in such a state as to afford any chance of their preservation. All that it was then deemed necessary to do was to remove some portions of metal and wood sticking into the hand, to wash the wound, to dress it with cerate, and envelope the whole in a bandage.

I was called toward the evening (says M. Benabin) to stop a hæmorrhage from the wound, which I easily succeeded in doing by pressure on the radial artery. I did not make any examination of the parts until the following day, and then, from the great swelling and tension, I could not distinguish them perhaps so well. The remaining stump of the metacarpal bone of the first finger was ragged; the scaphoid, the trapezium, and the trapezoid had not escaped much better. Many splinters of bone that had escaped notice were found attached to these bones as well as to the metacarpal bones of the second and third fingers. The case was so embarassing, that the surgeon urged on me and had assured the friends of the patient, that there was no resource except in immediate amputation, which he recommended to be practised at the lower part of the arm. This measure I objected to, considering that a partial amputation was preferable, and that if any part of the hand could be saved, it was our duty to attempt it; and, although the fingers might be deformed a little, that they might be made useful instruments hereafter. The assistants were inspired with confidence, but I did not feel so very sanguine myself, well-knowing that the numerous connections of the carpus would render the operation tedious and difficult. I examined again, and with great care, the wounded part; I weighed the chances of the operation, and having traced out the manœuvres necessary to be made, took such precautions as would diminish the risk of failure.

Although I could not obtain integument sufficient to cover the whole of the wound, I thought I might manage to save a flap large enough to cover the end of the radius. The parents and the patient acceded to my proposition with great readiness; the surgeon got the apparatus ready; and an assistant pressed upon the brachial artery. I carried a curved bistoury between the scaphoid and radius, dividing the tendon of the extensor carpi radialis longior, the ligaments of the wrist and the radial artery, which was secured as soon as the section was made. Having brought the instrument to the os lunare, I turned it and passed it between that bone and the former, extending the incision along the edge of the os magnum to the articulation of the metacarpal bones, of which I separated the attachments of the first, second, and third; the fragments of the two first now only remained undetached. The lower extremity of the third was uncovered, even almost to its middle, I wished to preserve it, and in order that I might not do any further injury to the soft parts, I protected them with a bandage whilst I equalized the end of the bone with a small saw. The operation was finished by removing several discolored and mangled portions of integument and muscle. An irregular wound was produced by these operations, and there was not a sufficient quantity of integument to cover its surface; however, I covered the upper part of the wound by a flap of integument which I had saved out of the back of the hand, and by bandaging and ligature I contrived to approximate the edges of the other part of the wound, leaving spaces for the discharge of matter. The whole was covered by lint, dipped in tepid water, and retained there by a light bandage. The arm was laid on a splint, and all the fingers kept extended except the middle one, which was allowed to be a little flexed, as it appeared to have suffered more than the others. The patient was placed in bed and put on a strictly low diet. The pulse soon after the operation became very hard and quick, on which account, eight ounces of blood were drawn and repeated the following day, the 23d. I raised the dressings on the 25th, without moving the bandage from the lower part, sufficiently to see the real state of the wound, which was satisfactory. The part which I had been able to cover with skin had re-united. Great swelling continued about the parts, but the lower end of the wound,

where the ligatures were placed, did not look so well as the other. The pulse was again vibrating and hard; the face red. Another bleeding was ordered and laxative mixture prescribed.

On the 26th, another small bleeding was considered necessary by the great congestion of the hand, and the great heat which extended up the arm. The laxative medicine was continued and the diet kept low. On the following day, these symptoms not yielding, he was again bled. The patient got up to have his bed made.

On the 28th, the erythematous inflammation had subsided, the same medicine was continued, the state of the wound had improved. On the 29th, the patient had epistaxis produced by pain in the head, and a sensation of heat in the nostrils. This happened about two o'clock in the morning, and was very abundant. I raised the dressings at the lower part of the wound, and immediately replaced them, still keeping the fingers in their natural position, although the arm was turned a little on its cubital side.

On the 30th, that part of the wound, situated over the radius, had cicatrized and the swelling in the other, or lower part of the wound had also begun to do so, which was then dressed with cerate in order to protect the delicate cuticle. January 1st, the size of the wound had very much diminished; the suppuration appeared of a good character. Towards the evening, he complained of a slight attack of fever, and during the night hæmorrhage to a considerable extent took place from the wound. The next night the fever appeared to be higher, and the hæmorrhage was in greater quantity than that of the preceding night. The patient was allowed gruel, and took a slightly sedative mixture. From this time the hæmorrhage only returned once; the progress of cicatrization gradually proceeded, and on the 28th of February, the wound had completely healed. The little finger and the third had completely recovered their motions, and the middle finger had not lost entirely its sensation. With the fingers thus preserved Triqué was enabled to resume his former occupations, which he would not have been able to do, had the hand been removed as first suggested.

Successful use of Iodine in a case of fetid discharge from the nose—Ozæna

A young woman, fourteen years of age, of a scrofulous habit, had been subject from infancy to a nasal secretion, of a yellowish colour, puriform in appearance and very fetid. The smell of this discharge was so disagreeable that no one could approach the patient without being disgusted, and it was secreted in such quantity as to wet four handkerchiefs during the day. Recollecting the good effects obtained by the use of iodine in leucorrhœa, M. Bland commenced the use of that medicine on this patient, on the 5th of June 1824, prepared in the following manner, a solution of *half a drachm* of the *hydriodate of potass* and *ten grains of iodine* were dissolved in an *ounce of distilled water*. Three drops of this solution were given at first three times in the day, in a cup of water, containing a little syrup. Externally a lotion was used composed of six ounces of water, and twenty-four drops of the solution of iodine before mentioned; this lotion was injected into the nostrils five or six times in the day. The doses of iodine were gradually augmented, so that on September the 1st, the patient took twenty drops of the tincture three times in the day, and the strength of the lotion was increased to sixty drops of the iodine.

By degrees, the morbid secretion lost its fetid character; diminished in quantity, and became at last simply mucous and of the natural appearance, and on the 21st of September, the only circumstance observable was, that the discharge was rather more than it naturally is. The doses of the medicine were gradually diminished, and the patient was restored to perfect health. *Nouv. Biblioth. Medicale.*

Uterine hæmorrhage suppressed by the employment of nitre in large doses.

This case is interesting in as much as it displays the efficacy of a remedy to restrain hæmorrhage which has been hitherto neglected, and but little

employed at least in France, where the management of such cases has been rendered almost null and ineffectual by the great reserve and timidity shown by practitioners. A woman, the mother of four children, had observed, that the menstrual discharge had returned twice during the month, and that it continued for a longer time than is usual; some little time after, without any assignable cause, a copious uterine hæmorrhage took place. The patient diminished in strength daily, and the flow of blood was in vain attempted to be arrested by bleeding from the arm, by the application of ice, by the employment of acids and cold drinks, and by the use of the rhatany root; on the contrary, it continued to increase. A similar occurrence once happened to a sister of the patient, and was not removed until the expulsion of a polypus from the uterus. It was supposed that this patient laboured under the same affection; an examination was made, the os tincæ was found a little opened, but the uterus was of its ordinary size.

On the day following this examination *two drachms of nitre* were directed to be taken in three doses; afterwards three drachms, and on the third day *four drachms* were taken during the twenty-four hours. The patient experienced no inconvenience from this large dose, and continued to take it for four days. On the fifth morning, the dose of a drachm and a scruple was rejected from the stomach; the dose was then diminished to half a drachm three times in the day for a few days, and each time that it was taken it produced nausea. The hæmorrhage ceased, and the medicine was discontinued.

This is not a solitary case, M. MARTINET, at one of the sittings of the Academy, read the history of the case of a patient to whom he had given *half an ounce* of the nitrate of potash in a single dose to arrest an uterine hæmorrhage. M. DESLANDES says, that he has increased the dose of this medicine from *one* drachm to *six*, during the day, in cases of uterine hæmorrhage and hemoptysis, without any inconvenience.

Bulletins de l'Athenée de Medecine.

OMODEI'S ANNALI UNIV. DI MEDICINA.

Curious case of a horny excrescence growing from the head.

Paul Rodriquez of Messico, a tall man, and of athletic temperament, was in the habit of wearing a large cap of a peculiar figure, in order to conceal a tumour which projected from the side of his head, and which had at last reached an extraordinary size. Being at work in a warehouse, he was desired one day to assist in lifting a barrel of sugar into a cart; the barrel slipt back a little and struck Rodriquez with such violence on his concealed horns, that he fell upon the pavement insensible. In this state he was conveyed to the hospital of St. Andrew, which afforded the surgeons an opportunity of examining accurately these curious growths. A horny projection was found growing from the right and anterior part of the head, measuring *fourteen inches* in circumference; and about one inch from its base it divided into *three branches*, two large and one small. The central horn, which was the largest, was curved and descended many inches below the ear, and then turned forward upon the cheek. The smallest excrescence of the three was situated just in front of the large one, and passed down on the cheek, just behind the external angle of the eye, as far as the middle of the superior maxillary bone, and was about three inches in length. Its extremity was separated about an inch from the curved termination of the middle horn, so that a considerable portion of the cheek, of a semicircular figure, was left between these two excrescences. The middle excrescence was very much the shape of a ram's horn, and had circular depressions and elevations marking the progress of its growth, just as the rings are seen on the horn of the ram, and it exhaled an odour exactly like the horn of that animal.

The violence with which the blow had been inflicted had broken off the lower extremity of the posterior horn, and had smashed its structure still higher up, so that its cavity was filled with blood. This singular excrescence did not adhere to the bones of the head, but appeared to grow

from a cyst in the scalp, the sides of which were very thick, and lined with a smooth membrane.

Many analogous cases are on record, but we have never met with any account of a case in which the size of the horny excrescence was so large as in the present.

STATUE OF DR. JENNER.

A marble statue of this celebrated man is to be shortly erected in Gloucester Cathedral. The Doctor is represented in the erect position, holding a roll of papers in his left hand; over his shoulders is thrown a piece of loose drapery. It may be considered a fine piece of sculpture, and is highly creditable to the chisel of SILVIER. The only fault we have to find with it is that the chest is represented rather wider than it should be in proportion to the rest of the figure, even admitting that Jenner was a stout man. The statue is at present exhibited in the Model Academy at Somerset-House.

ST. GEORGE'S HOSPITAL.

At a meeting of the Governors lately held at Willis' Rooms, St. James's, it was decided that the present building should be taken down, and that a new one, on a much larger scale, should be erected nearly on the site of the present, which looks more like a workhouse than an hospital. Did not the large letters painted on its front announce that it was St. George's Hospital, and supported by voluntary contributions, no stranger would imagine that it was a place destined for the reception of invalids. The DUKE OF YORK, who was at the meeting, subscribed 500*l.* toward the new edifice, and the persons assembled set down their names for about 1200*l.* more. A Committee was formed to receive the report of some architects, who are to deliver an estimate of the sum required; which, it is supposed, will not be less than 35,000*l.*

CANCER WARD ESTABLISHMENT OF THE MIDDDLESEX HOSPITAL.

IN a former Number we had occasion to offer some remarks upon the Abuses existing in this department, and we then charged the Surgeons with a "gross dereliction of duty," and with the violation of an existing law of the establishment, which requires that a register shall be kept of all Cancerous cases admitted into the Hospital. The Weekly Board of Tuesday se'nnight appear to have entertained a similar opinion of the conduct of their Surgeons, for on that day we had the satisfaction of hearing a Resolution made to the following effect:

"That *in future* the Book, *containing a register* of all Cancerous Cases admitted into the Hospital, be laid upon the table at each *Quarterly Meeting*, and that it form one of the *agenda* of that day."

We regard this Resolution as a *positive* acknowledgment of the justice of our remarks, and as an *indirect censure* upon the conduct of the Surgeons of the Hospital. It is entered upon the Minutes, and there stands a public record against them. We fear this Resolution will not "sit easy" upon the shoulders of the "Junior Surgeon;" he who so kindly and *diligently* "watches over the interest of the charity."* How will he shuffle and *boo* out of this? We beg to assure this *gentleman* that we have not yet done with him. We shall next week proceed to a *minute analysis* of the Report presented to the Weekly Board on the case of John Moore (the poor unfortunate victim of *Burnian Surgery*) in the ever memorable case of Hernia, and JOE's letter to the *Senate*. We can promise our readers a rich treat from this sublime piece of so-

* The Junior Surgeon has written a letter to the Board of Tuesday last, in which he has informed them, that at *ten days notice* he will produce certain *private memoranda* of interesting cases. Ten days notice! Private memoranda! Sufficient time and materials from which to *manufacture ten times ten interesting cases*

phistry and subterfuge. We shall continue honestly and fearlessly to discharge our duty, uninfluenced and undismayed, and shall impartially notice the *abuses of every Medical Institution.*

The register-book of the Cancer Ward of the Middlesex Hospital would have remained closed in *secula seculorum*; the executive of the Institution would have been kept in the most profound ignorance on the subject; the benevolent design of the founder of this ward would have been successfully frustrated, if our pages had not revealed the truth to those who possess the power to correct abuses when they are exposed. To boast of our own exploits may procure for us the censure of being vain; but when we take a retrospect of the benefits already accruing to some of the Metropolitan Hospitals from our exertions, we cannot refrain from bringing the subject again before the profession and the public. Practices which originated in ignorance, and which were perpetuated by indolence —practices disgraceful to the Surgery of the nineteenth century, were swept away, by one effort of the pen, from within those buildings, where they had so long stunk in the nostrils of the beholders. No wonder if the men who have fallen under the lash of our censure, for their misdeeds, should turn and twist themselves about (so do the worms when trod upon) to shake off the restraint of our observation from their practices, which they dread to have made public.

At this moment *a base conspiracy* is in operation to stifle and suppress the censorship which has been established over the actions of the advocates of Holé and Corner Surgery. *We know* these champions; we know their watchword, and their place of retreat. A masked battery, when discovered, is harmless; a ragged regiment is powerless; we know each by name, and will drag them forth to expose their nakedness and weakness. One engine is sufficient to rout them, and we shall employ no other. "*The thing*" they so much fear shall be directed against their *ignorant association*, and a short time will suffice to make the members of it skulk into their hiding places.

HOSPITAL REPORTS.

GUY'S HOSPITAL.

What is rather strange, a week has elapsed without an operation at this Hospital; the accidents admitted are few and unimportant.

ST. THOMAS'S HOSPITAL.

A case of Scrotal Hernia.

John Gwatkin, aged 63, was admitted into King's Ward, May 10th, with large scrotal hernia on both sides. He had been subject to the hernia on the left side for thirty years, and on the right for about ten, but both had hitherto been easily returned. Part of the hernia came down on the right side last night, but more about four o'clock this morning; the warm bath and taxis were employed unsuccessfully before he came to the hospital, by a surgeon in Gracechurch-street; he was brought in about a quarter past nine and was bled by the dresser; who again tried the taxis without success.

About one o'clock Mr. GREEN came to the hospital, and proceeded to give the Surgical Lecture. After lecture, he observed, "there is a case, I believe, of strangulated hernia in the house, *but as I have not had an opportunity of seeing it,* I do not know whether an operation will be necessary or not;" and the pupils were desired to meet him in the operating theatre. However, an operation was not required, as the hernia was reduced by the taxis. Now, as delays are dangerous, we ask Mr. Green why he did not see the patient *before* lecture? As he stated that he did not know whether an operation was required or not, was it not his duty to have ascertained that important circumstance, or does he wish to follow in the steps of some other *doubting delaying surgeons?*

The accidents admitted are, a simple fracture of the fibula, one of the femur, an injury to the head, and an injury to the hip from a fall.

In consequence of a part of the Hospital undergoing repair, few surgical patients were admitted during the last week.—No operations have been performed.

BARTHOLOMEW'S HOSPITAL.

Warren, the man mentioned in our last, whose eye was extirpated by Mr. LAWRENCE, has had no bad symptoms, and is doing extremely well. Shortly after the operation, there was some hæmorrhage, which was effectually subdued by the introduction of a piece of sponge into the orbit.

We have received the following Letter from one of the dressers of this Hospital, and the accuracy of its contents is attested by our Reporter; we hope the Surgeons to whom it refers will take a hint from it, and will henceforth be more attentive to the interests of their pupils.

To the Editor of THE LANCET.

SIR,

As I believe that your zeal for the advancement of professional knowledge will induce you to attend to any suggestion likely to add to the interests of medical students, I would beg particularly to call your attention to the present state of St. Bartholomew's Hospital. It is a great school of surgery, and, therefore, deserves a corresponding share of consideration, though, in some degree, it appears to have escaped that rigid inquiry which you have so beneficially made into other institutions of this Metropolis. You will find, Sir, upon a little scrutiny, a mass of corruption here that will at least excite your just indignation, though it may not your surprise. I do not intend to go into any detail of circumstances. I merely wish to direct your observation to it, because I am persuaded you may be the means of effecting much good, by a proper exposition of the subject in the pages of THE LANCET.

I may observe, however, that the surgeons (with the exception of Mr. Lawrence) evince no disposition whatever to communicate information to the pupils. Clinical lectures are never delivered on any cases in the Hospital; and sixpence is extracted from the pocket of the pupil every time he enters the dead-house, for the purpose of witnessing a post-mortem examination. Every thing, in fact, like the sapient regulations of the College of Surgeons, seems calculated to prevent the progress and repress the ardour of the student in a science noble in its object and useful in its tendency.

I am, Sir,
Your humble servant,
A DRESSER OF ST. BARTHOLOMEW'S.

May 13th, 1825.

MIDDLESEX HOSPITAL.

Case of extensive lacerated Wound of the Scalp.

Stephen Dunlay, a robust young man, was brought into the Hospital late on Sunday night, 1st May. In crossing the street, he had been knocked down by some loose horses and trampled upon. We found a very large wound of the scalp, extending from the vertex in a semicircular direction to the top of the ear, of more than four inches in length; the edges of the scalp were detached from the pericranium, but the pericranium was not cut. Another large incision extended from the point of termination of the last, in an oblique direction, across the temporal muscle, laying bare the fascia of that muscle and also the zygoma, and extending to the outer canthus of the eye. The flaps of the scalp were replaced, and the wound across the muscle closed by means of adhesive plaster, over which the cold lotion was applied. He was bled to ℥xx.

Two days after the accident there was very considerable tumefaction of the whole scalp and face, with much fever, but these symptoms subsided; suppuration came on and the wounds discharged freely; the cold applica-

tion was omitted and warm fomentations substituted. Up to the period of our present report he is doing well; the wounds suppurate freely and are beginning to granulate.

Case of a Fatal Wound of the Trachea.

William Lock, aged 56, a remarkably stout man, was brought into the Hospital on Sunday afternoon, 8th May, under the following circumstances: He has, for some time past, exhibited symptoms of mental alienation, being very melancholic and dejected; and he often complained of pain in the head. This afternoon, having retired into a back kitchen, by means of a razor he inflicted a wound on his throat, of the following size and character. It was about four inches in length, and nearly transverse, having, however, on the right side a slight obliquity downwards. The wound had evidently been made by the right hand of the patient. It was exactly across the middle of the thyroid cartilage, and the wound of the cartilage was so exceedingly jagged that portions of it were nearly detached, and only a small portion at the back part remained undivided. It appears that some *surgeon*, having been called to him previous to his being brought to the Hospital, had stitched up the wound in the integuments without regard to the wound of the cartilage, the consequence of which stitching up was, that air escaped from the wound into the adjacent cellular membrane, and occasioned emphysema of the upper part of the body, to an enormous extent. The poor man had also been bled in both arms, to the amount of thirty ounces. His breathing was exceedingly laborious, almost amounting to suffocation, and the "guggling" of fluid in the trachea was very distinct. The stitches were (of course) immediately removed, and the wound opened, which afforded much relief to the patient's breathing, and a considerable quantity of bloody sputa was thrown out from the trachea by the force of expiration. The carotid arteries had escaped from being wounded. The pulse, at the wrist, was moderately firm. The bleeding from the soft parts which had been divided had entirely ceased.

The patient was quite insensible. After waiting some time, the different pieces of cartilage were carefully brought together by means of very fine sutures, and the external wound as carefully closed.

We learn that shortly after this the breathing became very difficult, and the countenance livid, and that he died apparently suffocated.

It would have been right in this case not to have closed the wound in the cartilage entirely, but to have left an aperture in the middle for the expulsion of the sputa; as in these cases the blood continues to flow from the divided surfaces into the trachea, and not only occasions much irritation, but actually produces suffocation, and it must be remembered, that wounds of the trachea never unite by the first intention. It is recommended in cases of wounds of the larynx, or trachea, to convey food or medicine into the stomach by means of an elastic-gum catheter, as the elevation and depression of the larynx, attendant on the act of deglutition, produce great disturbance in the wound; "the union of the trachea is prevented, and even the outward wound torn open."

A very interesting case of wound of the larynx, successfully treated by Mr. C. HADEN, will be found in the Medico Chirurgical Transactions for 1823.

Operation.

On Monday, Mr. CARTWRIGHT removed a nævus of considerable size from a child about eight months old. It was situated upon the under edge of the right pectoral muscle. And presented the usual character of that species of tumour described by Mr. JOHN BELL, as "aneurism from anastomosis." Mr. JOE BURNS rendered himself extremely useful on this occasion, by his *matronly* attentions to the infant.

The accidents of importance admitted this week, are a case of fractured patella, fractured tibia and fibula, and a case of fractured fibula, with dislocation of the ancle inwards.

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By the same Author, Second Edition of PRACTICAL TREATISES ON TROPICAL AND SCORBUTIC DYSENTERY, INDIGESTION, SCURVY, &c. as they occur in the East and West Indies, &c.

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